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Ms. Lani Andam Regional Water Quality Control Board, Central Valley Region 11020 Sun Center Dr., Suite 200 Ranch Cordova, CA 95670

TENTATIVE WASTE DISCHARGE REQUIREMENTS FOR WILDHURST VINEYARDS – Clearlake Pomo Tribal Request

Dear Ms. Andam;

BSK Associates (BSK) has been asked to prepare this letter on behalf of three Clear Lake Pomo Tribes (Tribes), regarding their request for the modification of the Tentative Waste Discharge Requirements (WDR) for the Wildhurst Vineyards Wastewater Treatment Facility (project).

The main concern of the Tribes is the potential impact from the project on a State of California Species of Special Concern, the Clear Lake hitch (*Lavinia exilicauda chi*). The hitch is a significant part of Tribal culture and history. Kelsey Creek, adjacent to the project, is one of two documented spawning streams for this fish.

The issues of concern were brought to Board staff in the Tribes' letter dated June 10, 2010, and we had a follow-up meeting on July 20, 2010 between Tribal representatives, the project proponent and board staff. We were given an opportunity to review the file on July 28, 2010. The meeting and file review touched on several points, with the following as our understanding, and/or our remaining concerns:

- 1. The Board staff have offered a communications plan for tribal involvement in future WDR's and is discussing the legal implications of "Interested Party" status internally.
- 2. The Tentative WDR's proposes for "Limited degradation of high-quality groundwater" in a drainage that is both adjacent to one of the last spawning areas of a listed fish species, and is documented to have impaired water quality.
 - a. Board staff questioned the rationale for concern regarding surface water impacts. We identified that erosion from the storage pond flanks, sheet flow from the unbermed land application area, and shallow groundwater impacts to Kelsey Creek as specific issues of tribal concern.
 - b. Board staff's opinion is that impacts to shallow groundwater would flow away from the creek, as it appears to be a "losing" reach. We identified information,

- c. using the supplied figures provided by the project proponent at the meeting, that groundwater flow direction has included vectors toward the Creek in at least one monitoring quarter.
- d. Subsequent file review identified an apparent reporting error in the 2008 fourth quarter report that stated groundwater flow was to the northwest (towards the creek) when the figure(s) showed groundwater flow to the northeast.
- e. Given the existing variable groundwater flow direction, the Tribe's request remains for a well that would intercept flow between the land application area and the creek. Additional data from non-drought years and modeling to show that localized groundwater mounding would not occur from the land application in the direction of the creek would be beneficial in this analysis.
- f. Some of the groundwater figures identified flow direction in areas that are outside monitoring well control data, this provides erroneous inferences for areas not covered by wells.
- 3. The file review brought to our attention that an adjacent property owner had similar concerns to those raised in our original letter. Specifically, placement of the wastewater facility in an area with repeated local flooding and the potential for scour.
 - a. The adjacent owner identified 3' flooding across the site and this is similar to the FEMA maps which show AO, 2' flood level. Does the freeboard for the treatment ponds include the flood height with a wave action factor?
 - b. In addition, the letter noted that there has been the discovery of historic tribal artifacts at the wastewater site, and the proximity to a burial site (SDA-66). While the Board may not have specific purview to assess the potential for tribal cultural features, it would be within its responsible agency status to forward the related concerns to the lead agency.
- 4. The project is reliant on the permeability of the land surface land application of waste. Soil logs provided by the project proponent identified silty-clay for the first 5 feet bgs in the borings for MW-1 and 2, and "hardpan" for the first 9 feet bgs in the MW-3 location. The percolation testing logs, however, identified clay loam. These results appear inconsistent.
- 5. Board staff's opinion is that the project is compliant with SWRCB No. 60-16 (Antidegradation) policy. Clarification is needed with regard to the following:
 - a. Did the staff make a finding in that regard for this project?
 - b. If the staff made a finding, how can the WDR allow degradation in a basin where the receiving water has a TMDL for nutrients? The nutrient TMDL included modeling of this very stream because it already has a significant contribution to on impairing beneficial use.¹

http://www.waterboards.ca.gov/centralvalley/water issues/tmdl/central valley projects/clear lake nutrients/cl nut tech_tmdl.pdf Allocation Strategy: The Kelsey Creek watershed was allocated to as a whole, based on the degree of anthropogenic influence and the potential for achieving load reductions. The modeling system estimated that this watershed contributed 6% of the total phosphorus load to Clear Lake during the 1985-1991 period. A reduction in phosphorus loading of 25% is required from this watershed, based on the potential for improvement and land use



It is unclear how a finding could be made when the beneficial uses and water quality objectives include: warm freshwater habitat, warm spawning, and wildlife habitat (CVRWQCB, 1994). Placing a listed species' last spawning streams at risk would appear on face value to require consideration under beneficial use provisions, and not pass the "maximum benefit" test.

Thank you for the opportunity to comment on the matter. Please call the undersigned at (916) 853-9293 if you have any questions.

BSK, Inc.

Erik Ringelberg

Ecological Services Group Manager